

R E M A R K S

Reconsideration of this application, as amended, is respectfully requested.

RE: THE ALLOWABLE SUBJECT MATTER

The Examiner's allowance of claims 9 and 13 and the Examiner's indication of the allowability of the subject matter of claim 11 are respectfully acknowledged.

Allowable claim 11 has been amended to be rewritten in independent form to include the subject matter of claim 1 from which claim 11 formerly depended. No new matter has been added, no new issues with respect to patentability have been raised.

Accordingly, it is respectfully requested that the amendment to claim 11 be approved and entered under 37 CFR 1.116, and it is respectfully submitted that claim 11 is now in condition for immediate allowance along with allowed claims 9 and 13.

RE: THE PRIOR ART REJECTION

Claim 1 was rejected under 35 USC 103 as being obvious in view of the combination of the admitted prior art and newly cited USP 5,311,190 ("Devendorf et al"); and claim 2 was rejected under 35 USC 103 as being obvious in view of the combination of the admitted prior art, Devendorf et al and USP 5,334,969 ("Abe et al"). These rejections, however, are respectfully traversed.

The present invention as recited in independent claim 1 is directed to a radar oscillator comprising a first switch which opens or closes a power supply line for amplifier means including an amplifier provided in an output stage of an oscillating unit of the radar oscillator. As recited in claim 1, the switch opens or closes the power supply line based on a pulse signal indicating a transmission timing of a radar wave, "thereby changing the operating state of the oscillating unit to the oscillating state or the oscillation stop state". As such, in the state where the power supply line for the amplifier means is opened by the switch, the oscillating unit (which implies the oscillating unit in its entirety) is brought to the operation stop state (i.e., the oscillating unit is not operating).

With the structure of the present invention as recited in claim 1, an important advantage is achieved when the oscillating unit is in the operation stop state and not operating because leakage of oscillation output in the operation stop state is reduced and/or eliminated. Also, the width and interval of radar pulses can be set appropriately in accordance with a radar search range and an obstacle to be subjected to measurement.

It is respectfully submitted that the prior art cited by the Examiner does not disclose, teach or suggest a radar oscillator having the above described structural features and advantageous effects of the present invention as recited in claim 1.

As recognized by the Examiner, the admitted prior art does not disclose a first switch for opening or closing a power supply line to amplifier means including an amplifier in the output stage of a radar oscillator which can cause a change in the operating state of the oscillating unit to an oscillating state or an oscillation stop state, as according to present invention as recited in claim 1.

Newly cited Devendorf et al discloses a transmit/receive circuit including a voltage-controlled oscillator (VCO) 29 and an amplifier 11 which receives power from a voltage source VDC via a switch 42. As disclosed at column 2, lines 43-53 of Devendorf et al, the switch 42 is controlled to provide power to the amplifier 11 during transmit intervals (gated on) and not during receive intervals (gated off).

It is respectfully pointed out, however, that in view of the placement of the amplifier 11 between the RF switch 44 and the antenna element 15 in Devendorf et al, when the switch 42 is gated off during receive intervals and the amplifier 11 does not receive power, the VCO 29 can still operate because controlling the supply of power to the amplifier 11 does not affect the ability of the VCO 29 to operate. As such, in Devendorf et al, switching the power off to the amplifier 11 does not cause a change in the operating state of the oscillating unit to be in an

oscillating state, or in an oscillation stop state wherein the oscillating unit is not operating.

In other words, in Devendorf et al, the opening or closing of the power supply line for the amplifier does not effect "changing of the operating state of the oscillating unit to the oscillating state or the oscillation stop state", as according to the present invention as recited in claim 1. Indeed, it is respectfully submitted that Devendorf et al is devoid of any teaching or suggestion to situate the amplifier 11 in an output stage of a radar oscillator so that opening or closing a power supply line thereto has the effect of causing the oscillating unit in its entirety to be in either an oscillating state or an oscillation stop state.

In summary, it is respectfully submitted that Devendorf et al and the admitted prior art do not disclose, teach or suggest a (first) switch which opens or closes the power supply line to an amplifier means including an amplifier in an output stage of an oscillating unit to effect of changing the operating state of the oscillating unit to the oscillating state or the oscillation stop state, as according to the present invention as recited in independent claim 1.

Accordingly, it is respectfully submitted that independent claim 1, and claims 2-3 and 14-17 depending therefrom, clearly patentably distinguish over the admitted prior art and Devendorf

et al, taken in combination and together with Abe et al under
35 USC 103.

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In view of the foregoing, entry of this Amendment, allowance
of the claims and the passing of this application to issue are
respectfully solicited.

If the Examiner has any comments, questions, objections or
recommendations, the Examiner is invited to telephone the
undersigned at the telephone number given below for prompt
action.

Respectfully submitted,

/Douglas Holtz/

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